

Title (en)

LIQUID CRYSTAL DISPLAY DEVICE COMPRISING A MICROLENS ARRAY AND METHOD FOR MANUFACTURING THE SAME.

Title (de)

FLÜSSIGKRISTALLANZEIGEGERÄT MIT MIKROLINSENARRAY UND VERFAHREN ZU SEINER HERSTELLUNG.

Title (fr)

DISPOSITIF D'AFFICHAGE À CRISTAUX LIQUIDES COMPRENANT UN RÉSEAU DE MICROLENTILLES ET MÉTHODE POUR SA FABRICATION.

Publication

EP 2071390 B1 20101201 (EN)

Application

EP 07791179 A 20070723

Priority

- JP 2007064447 W 20070723
- JP 2006262368 A 20060927

Abstract (en)

[origin: EP2071390A1] There is provided a liquid crystal display panel with microlenses in which deformation, peeling, and the like of an optical film are not likely to occur and which has a good displaying quality. A liquid crystal display panel according to the present invention includes: a microlens array provided on a light-incident side of a liquid crystal display panel; a support provided on the light-incident side of the liquid crystal display panel so as to surround the microlens array; and an optical film attached to the liquid crystal display panel via the support. A gap is formed between the microlens array and the optical film; at least one vent hole connecting a space outside the support and the gap is formed in the support; and, when seen perpendicularly with respect to the plane of the liquid crystal display panel, the vent hole extends in a bending manner or the vent hole extends in an oblique direction with respect to an inner face of the support.

IPC 8 full level

G02F 1/1335 (2006.01)

CPC (source: EP US)

G02F 1/133526 (2013.01 - EP US); **G02F 2201/36** (2013.01 - EP US)

Cited by

EP2878479A3

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2071390 A1 20090617; **EP 2071390 A4 20100120**; **EP 2071390 B1 20101201**; AT E490488 T1 20101215; CN 101517463 A 20090826; CN 101517463 B 20110622; DE 602007010964 D1 20110113; JP 4880692 B2 20120222; JP WO2008038453 A1 20100128; US 2010020263 A1 20100128; WO 2008038453 A1 20080403

DOCDB simple family (application)

EP 07791179 A 20070723; AT 07791179 T 20070723; CN 200780034648 A 20070723; DE 602007010964 T 20070723; JP 2007064447 W 20070723; JP 2008536291 A 20070723; US 44221807 A 20070723